

IN THE CLAIMS

1. (currently amended) An apparatus authentication information system having a management server, an authentication server, and a terminal client device and used for including apparatus authentication information in said terminal client device as information used by an apparatus authentication server to authenticate said terminal client device, wherein said system further comprises:

said management server provides source information including unique client device identifier used as a source for generating apparatus authentication information to said terminal client device and provides said apparatus authentication information or said ~~source information~~ unique client device identifier to said apparatus authentication server for authenticating said terminal client device; and

said terminal client device stores source information and generates said apparatus authentication information using said source information and, at a terminal client device authentication time, transmits said apparatus authentication information generated from said unique client device identifier ~~source information~~ to the authentication server; and

said authentication server granting access to information at the management server if the authentication information or unique client device identifier received from the management server to the apparatus is consistent with the authentication information received from the client device.

2. (currently amended) The apparatus authentication information system according to claim 1 wherein:

said management server provides said terminal client device with a conversion value obtained as a result of a conversion process carried out by using a predetermined directional-function on said apparatus authentication information generated from said source information;

said ~~terminal~~client device generates a conversion value by execution of a conversion process using said predetermined directional-function on said apparatus authentication information generated from said source information; and

said ~~terminal~~client device compares said generated conversion value with said conversion value received from said management server to determine whether said generated conversion value is equal to said received conversion value.

3. (currently amended) The apparatus authentication information system according to claim 1 wherein:

said ~~terminal~~client device provides said management server with a conversion value obtained as a result of a conversion process carried out by using a predetermined directional-function on said apparatus authentication information generated from said source information;

said management server generates a conversion value by execution of a conversion process using said predetermined directional-function on said apparatus authentication information generated from said source information; and

said management server compares said generated conversion value with said conversion value received from said ~~terminal~~client device to determine whether said generated conversion value is equal to said received conversion value.

4. (currently amended) A ~~terminal~~client device comprising:

source-information acquisition means for acquiring source information including a unique ~~terminal~~client device identifier provided by a management server and used for generating apparatus authentication information;

generation means for generating apparatus authentication information from said acquired source information; and

apparatus authentication information transmission means for transmitting said generated apparatus authentication information to an apparatus authentication server for granting access to information at the management server based on the authentication information; and

receiving means for receiving information from the providing server if the authentication information transmitted by the client device is consistent with authentication information transmitted to the authentication server by the management server.

5. (currently amended) The ~~terminal~~client device according to claim 4 wherein:

said source information is encrypted apparatus authentication information obtained as a result of a process to encrypt said apparatus authentication information; and

said generation means generates said apparatus authentication information by decrypting said encrypted apparatus authentication information.

6. (currently amended) The ~~terminal~~client device according to claim 4, further comprising storage means for encrypting apparatus authentication information generated by said generation means and storing a result of encrypting said apparatus authentication information, wherein said apparatus authentication information transmission means decrypts apparatus authentication information stored in said storage means and transmits a result of decrypting said apparatus authentication information.

7. (currently amended) The ~~terminal~~client device according to claim 6, further comprising key generation means which is used for generating an encryption key to encrypt said apparatus authentication information to be stored into said storage means and decrypt apparatus authentication information stored in said storage means by using information peculiar to

said ~~terminal~~client device when it is desired to utilize said encryption key.

8. (currently amended) The ~~terminal~~client device according to claim 7, further comprising key deletion means for deleting said generated encryption key within a predetermined period after use of said encryption key.

9. (currently amended) The ~~terminal~~client device according to claim 4, further comprising:

conversion-value acquisition means for acquiring a conversion value obtained as a result of a conversion process carried out by using a predetermined one-directional function on said apparatus authentication information from said providing server;

conversion-value computation means for computing a conversion value by execution of a conversion process using said predetermined one-directional function on said generated apparatus authentication information; and

determination means for determining whether said acquired conversion value is equal to said computed conversion value.

10. (currently amended) The ~~terminal~~client device according to claim 9, further comprising:

conversion-value computation means for computing a conversion value by execution of a conversion process using another one-directional function on said generated apparatus authentication information; and

conversion-value-providing means for providing said computed conversion value to said management server.

11. (currently amended) The ~~terminal~~client device according to claim 4, further comprising:

conversion-value computation means for computing a conversion value by execution of a conversion process using a

predetermined one-directional function on said generated apparatus authentication information; and

conversion-value-providing means for providing said computed conversion value to said management server.

12. (currently amended) The ~~terminal~~client device according to claim 4, further comprising storage means for storing said acquired source information, wherein said apparatus authentication information transmission means generates apparatus authentication information from said stored source information and transmits said apparatus authentication information to said apparatus authentication server.

13. (currently amended) An apparatus authentication information processing method adopted in a ~~terminal~~client device implemented as a computer comprising source-information acquisition means, generation means and apparatus authentication information transmission means, said apparatus authentication information processing method comprising:

aAcquiring, by the client device, source information including a unique client device identification from a providing server as a source used for generating apparatus authentication information;

generating, by the client device and the providing server, apparatus authentication information from said acquired source informationunique client device identification; and

transmitting, by the client device, said generated apparatus authentication information;

transmitting, by the providing server, said generated apparatus authentication information to an apparatus authentication server at an apparatus authentication time; and

granting access to information at the management server if the authentication information or unique client device identifier received from the management server to the apparatus

is consistent with the authentication information received from the client device.

14. (previously presented) The apparatus authentication information processing method according to claim 13 whereby:

said source information is encrypted apparatus authentication information obtained as a result of a process to encrypt said apparatus authentication information; and

generating further comprises decrypting said encrypted apparatus authentication information.

15. (previously presented) The apparatus authentication information processing method according to claim 13, further comprising encrypting apparatus authentication information generated by said generation means and storing said encrypted apparatus authentication information into a memory also employed in said computer whereby transmitting further comprises decrypting and transmitting said encrypted apparatus authentication information stored in said memory.

16. (currently amended) The apparatus authentication information processing method according to claim 15 wherein said computer further comprises key generation means, said apparatus authentication information processing method further generating an encryption key using information peculiar to said ~~terminal~~client device.

17. (previously presented) The apparatus authentication information processing method according to claim 16 further comprising deleting said generated encryption key within a predetermined period right after use of said encryption key.

18. (previously presented) The apparatus authentication information processing method according to claim 13 wherein said computer further comprises conversion-value acquisition means, conversion-value computation means and determination means, said apparatus authentication information processing method further comprising:

acquiring a conversion value using a predetermined one-directional function on said apparatus authentication information from said providing server;

computing, using said conversion value computation means, a said predetermined one-directional function to said generated apparatus authentication information; and

determining, using said determination means whether or not said acquired conversion value is equal to said computed conversion value.

19. (previously presented) The apparatus authentication information processing method according to claim 18 wherein said computer further comprises conversion-value computation means and conversion-value-providing means, said apparatus authentication information processing method further including:

computing, using said conversion-value computation means, a conversion value by execution of a conversion process using another one-directional function on said generated apparatus authentication information; and

providing, using said conversion-value-providing means, said computed conversion value to said management server.

20. (previously presented) The apparatus authentication information processing method according to claim 13 wherein said computer further comprises conversion-value computation means and conversion-value-providing means, said apparatus authentication information processing method further including:

computing, using said conversion-value computation means, a conversion value by execution of a conversion process using a predetermined one-directional function on said generated apparatus authentication information; and

providing, using said conversion-value-providing means, said computed conversion value to said management server.

21. (previously presented) The apparatus authentication information processing method according to claim 13 wherein said

computer further comprises a memory for storing said acquired source information and, wherein transmitting further comprises generating apparatus authentication information using said stored source information and transmitting said generated apparatus authentication information to said apparatus authentication server.

22.-30. (cancelled)

31. (currently amended) A storage medium, which can be read by a computer and is used for storing an apparatus authentication information processing program to be executed by said computer to perform a method comprising:

acquiring, by the client device, source information including a unique client device identification provided by a providing server and used for generating apparatus authentication information;

generating, by the client device and the providing server, apparatus authentication information using said ~~acquired source information~~ unique client device identification; and

transmitting by said providing server said generated apparatus authentication information to an apparatus authentication server at an apparatus authentication time; and

granting access to information at the management server if the authentication information or unique client device identifier received from the management server to the apparatus is consistent with the authentication information received from the client device.

32. (currently amended) A providing server comprising:

source-information-providing means for providing a ~~terminal~~ client device with source information including unique ~~terminal~~ client device identifier used as a source for generating apparatus authentication information;

apparatus authentication information providing means for providing said apparatus authentication information or said

source information to an apparatus authentication server for authenticating said ~~terminal~~client device;

conversion-value acquisition means for acquiring a conversion value by using a predetermined one-directional function on apparatus authentication information generated based on said source information from said ~~terminal~~client device;

conversion-value computation means for computing a conversion value using said one-directional function based on said apparatus authentication information; and

determination means for determining whether said acquired conversion value is equal to said computed conversion value.

33. (previously presented) The providing server according to claim 32, further comprising determination-result transmission means for transmitting a result produced by said determination means to a main organization.

34.-37. (cancelled)

38. (currently amended) A storage medium, which can be read by a computer and is used for storing an apparatus authentication information processing program to be executed by said computer to perform a method comprising:

providing a ~~terminal~~client device with source information including unique identification information peculiar to the ~~terminal~~client device used as a source for generating apparatus authentication information;

function of providing said apparatus authentication information or said source information to an apparatus authentication server for authenticating said ~~terminal~~client device;

acquiring a conversion value obtained as a result of a conversion process carried out by using a predetermined one-directional function on apparatus authentication information

generated on the basis of said source information from said
| terminalclient device;

computing a conversion value by execution of a
conversion process using said one-directional function on said
apparatus authentication information; and

producing a result of determination as to whether or
not said acquired conversion value is equal to said computed
conversion value.